

### REMARKS

Entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested.

The Office Action Summary correctly indicates that claims 1-14 were pending in the application. Claims 1-14 are under consideration and stand rejected.

Claims 1-4, 8, and 13 have been amended. Claim 14 has been canceled.

Claims 1 to 4 have been amended to recite isolated corn root preferential promoter fragments and isolated corn root preferential promoter regions. Claim 4 has further been amended to introduce alternative wording for the leader sequence of GL5 as described in SEQ ID NO: 13. Support for this amendment can be found in the sequence listing as filed, entry SEQ ID NO: 13 (feature 7). In claim 8, typographical errors in the names of ISP proteins have been corrected. Claim 13 has been amended to incorporate subject matter from claim 14, which has been canceled.

In paragraphs 021 to 024, references to SEQ ID NOS corresponding to the sequences set forth in the figures have been added.

A corrected sequence listing has been substituted for the sequence listing that was originally filed. In the substitute sequence listing, an incorrect sequence entry SEQ ID NO:14 for the about 1300 bp corn root preferential promoter (GL5 promoter; see paragraph [063]) has been replaced by the correct sequence, as described, *e.g.*, in Figure 4 (paragraph [024]). Furthermore, the numbering of SEQ ID NOS:15 on now correspond to the references in the specification. A person of ordinary skill in the art would immediately recognize from the listing of the sequences represented in the sequence listing (paragraph [063]), that former entry SEQ ID No 15 (oligonucleotide primer GVK22) was actually in SEQ ID No. 16, former

entry SEQ ID No 16 (oligonucleotide primer GVK23) was actually represented in SEQ ID No. 17, and so on. The sequence numbering has been corrected in the corrected sequence listing, and the sequence represented in former entry SEQ ID NO: 15 has been deleted. A computer readable form of the corrected sequence listing is also submitted concurrently herewith.

No prohibited new matter has been introduced by way of the above amendments. Applicants reserve the right to file a continuation or divisional application on subject matter canceled by way of this Amendment.

#### ***Objections to the Specification***

The specification has been objected to for failing to meet the requirements of 37 C.F.R. § 1.821 in omitting reference to the sequences illustrated in Figures 1-4 by their sequence identifiers in the brief description of figures. Paragraphs [021] to [024] have been amended to introduce the corresponding sequence identifiers thereby obviating this objection.

#### ***Claim Objections.***

Claim 8 has been objected to because recitations "ISPA1" and "ISPA2" contain typographic errors. Claim 8 has been amended to correct the errors, rendering the objection moot.

#### ***Claim rejections – 35 U.S.C. § 101***

Claims 1 to 4 have been rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Claims 1 to 4 have been amended to recite isolated corn root preferential promoter fragments and isolated corn root preferential

promoter regions as suggested by the Examiner to make explicit the implicit fact that naturally occurring nucleic acid molecules are not intended to be within the scope of the claims. Withdrawal of the rejection of claims 1-4 under 35 U.S.C. § 101 is requested.

***Claim rejections – 35 U.S.C. § 112, second paragraph***

Claims 4, 13 and 14 have been rejected under 35 U.S.C. 112, second paragraph, for allegedly being indefinite in failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 has been rejected for reciting nucleotides at position 1281-1308, while SEQ ID NO: 14 erroneously listed only 500 bp. The sequence listing has been corrected to replace the wrongly entered nucleotide sequence of SEQ ID NO: 14 with the correct nucleotide sequence as set forth in the specification , e.g. in Figure 4.

Claim 13 has been rejected for reciting the limitation said plants in lines 3 and 5 and further for reciting the allegedly unclear term “providing.” Claim 13 has been amended. A person of ordinary skill in the art will understand the metes and bounds of claim 13 as amended.

Claim 14 has been cancelled.

Withdrawal of the rejection of claims 4, 13 and 14 under 35 U.S.C. § 112, second paragraph is respectfully requested.

***Claim rejections – 35 U.S.C. § 112, first paragraph***

Claims 1 to 14 have been rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. The rejection is respectfully traversed. The Examiner alleged that the specification does not describe a

sufficient number of nucleotide sequences having at least 97% sequence identity to the nucleotide sequence of SEQ ID NO: 1 from the nucleotide at position 1-338 pr SEQ ID NO: 2 from the nucleotide at position 11-1196, other than the nucleotide sequence of SEQ ID NO: 1 from the nucleotide at position 1-338 pr SEQ ID NO: 2 from the nucleotide at position 11-1196.

Without acceding to the allegations of the Examiner, but simply in order to expedite prosecution of subject matter which has been acknowledged as having been sufficiently described, claims 1-4, 8, and 13 have been amended and claim 14 has been canceled. Claims 1-13, as amended, recite subject matter that is fully described by the specification.

Claims 1 to 14 have been rejected under 35 U.S.C. 112, first paragraph, because the specification allegedly does not reasonably provide enablement commensurate in scope with the scope of these claims. The rejection is respectfully traversed.

The Examiner has acknowledged that the specification is enabling for the nucleotide sequence of SEQ ID NO: 1 from the nucleotide at position 1-338 and SEQ ID NO: 2 from the nucleotide position 11-1196 as root preferential promoters in corn.

Without acceding to the allegations of the Examiner, but simply in order to expedite prosecution of subject matter which has been acknowledged as being supported by an enabling disclosure, claims 1-4, 8, and 13 have been amended and claim 14 has been canceled.

It is respectfully submitted that the assertion that using a promoter isolated from one species of plants produces unpredictable results in terms of specificity of expression of a gene in another plant species is inapplicable to the isolated nucleic acid sequences of claims 1 to 4 or the chimeric genes of claims 5 to 8 and is also immaterial for claims 9 to 12, directed to plant cells, plants or seeds comprising chimeric genes as claimed. It should be borne in mind

that the utility of the claimed promoters, plant cells, plants or seeds is not limited to root-specific expression of a chimeric gene. However, claim 13, which is directed to a method for expressing a biologically active RNA preferentially in the roots of a plant, has been amended to recite corn plants, thereby obviating the allegation.

For at least the foregoing reasons, withdrawal of the rejections of claims 1-13 under 35 U.S.C. § 112, first paragraph is respectfully requested.

### CONCLUSION

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this application, it would be appreciated if the Examiner would telephone the undersigned concerning such questions so that prosecution of this application may be expedited.

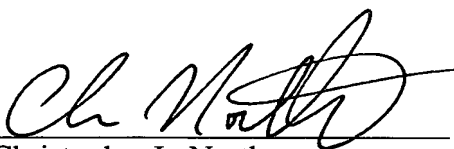
The Director is hereby authorized to charge any appropriate fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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